

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 13-103

PROJECT INFORMATION

Project Title: Dobson Grassland Restoration Phase I

Region and Game Management Unit: 2C

Local Habitat Partnership Committee (LHPC):

- Springerville HPC

Was the project presented to the LHPC?

YES[X] **NO**[]

Has this project been submitted in previous years? **YES**[] **NO**[X]

If Yes, was it funded? **YES**[] **NO**[] → **Funded HPC Project #(s):**

Project Type: Mechanical thinning

Brief Project Summary: The overall goal of this project involves juniper grinding on approximately 6,000 acres of historic grassland and woodland. This project will build on nearly 2,000 acres of juniper woodland that have already been treated by the Arizona Game and Fish Department and the Natural Resources Conservation Service (see map). Thinning for this project will be conducted in phases, starting from the thinnest areas and working inward towards the thickest. Phase I of this project will involve thinning approximately 1,800 acres of historic grassland.

Big Game Wildlife Species to Benefit: Pronghorn, deer, elk

Implementation Schedule (Month/Day/Year):

Project Start Date: Upon award

Project End Date: Summer 2015

Environmental Compliance:

NEPA Completed: **Yes**[] **No**[] **N/A**[X]

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

Yes[X] **No**[] **N/A**[]

Projected Completion Date: Will be completed by December 2013

Arizona Game and Fish Department EA Checklist: **N/A**[]

To be Completed by: Rachel Williams

Projected Completion Date: Upon award

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 45,000

Cost Share or Matching Funds: \$ 90,000

Total Project Costs: \$ 135,000

PARTICIPANT INFORMATION

Applicant (please print):

Rachel Williams

Address:

2878 E. White Mountain Blvd.

Pinetop, Arizona 85935

E-mail:

rwilliams@azgfd.gov

Telephone: (928) 367-4281

Date: 8/15/2013

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with: Arizona Game and Fish Department, Natural Resources Conservation Service, Arizona State Land Department, Timberline Cattle Company, Reliance Brush Management

NEED STATEMENT – PROBLEM ANALYSIS:

The proposed project is on 6,000 acres of State Trust Land comprised of grasslands in the early stages juniper invasion as evidenced by lack of large, older growth juniper trees. The goal of this project is to remove junipers before they reach densities that begin to affect habitat use by wildlife and quality of forage. This project will grind juniper trees using a Hydro Ax rubber tired loader with a Fecon mastication attachment. This area is used extensively by elk, deer, and pronghorn throughout the year and the rancher is currently working with NRCS to develop waters throughout the ranch that will benefit wildlife as well as livestock.

PROJECT OBJECTIVES:

1. Remove 80-95% of the encroaching junipers in this area. Trees will be left in a clumped/grouped pattern consisting of large open areas with scattered groups/clumps of trees left, especially in rocky areas, areas with shallow soils and drainages.
2. Increase line-of-site visibility for pronghorn to reduce predation and increase habitat use.
3. Increase forage available to wildlife by reducing juniper cover.

PROJECT DESCRIPTION AND STRATEGIES:

This is phase 1 of a multi-year project that will involve treating a total of approximately 6,000 acres. The current phase will involve grinding live juniper trees on approximately 1,800 acres of historic grasslands using a Hydro Ax rubber tired loader with a Fecon mastication attachment. Mulch piles will be left on site and will not exceed 18" in height. Approximately 80-95% of the junipers in the treatment area will be removed. Larger, old growth junipers or junipers in rocky outcrops will be left. Grinding has nearly 100% mortality of shaggy-bark juniper trees. Occasional alligator junipers may be found in this area and will likely have very low mortality rates due to the species' ability to resprout from the roots.

PROJECT LOCATION:

The project is located on Carey Dobson's Timberline Ranch just east of Vernon in Apache County. The project is located just north of U.S. 60.

This project will treat approximately 1,800 acres of State Trust administered land on T11NR26E, Sections 35 and 36, and T10NR26E Sections 1, 2, 7, 8, 11, 12, 13, 14, 17, and 18.

LAND OWNERSHIP AT THE PROJECT SITE(S):

(if the project area is private property, please state specifically and provide the landowner's name)

- State Trust Land

IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

YES[] NO[] N/A[]

HABITAT DESCRIPTION:

The habitat within Phase I of this project consists of a mix of grasslands interspersed with stands of shaggy-bark juniper trees. Topography is generally flat or gently rolling with drainages traversing the area. The flats and swales were historically grasslands or a grassland/shaggy-bark juniper savannah.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

\$45,000 – Juniper grinding at \$50/acre for 900 acres

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

\$45,000 - A total of \$45,000 was funded through the Arizona Game and Fish Department's Hunter Access program. These funds will be used to grind juniper at \$50/acre for a total of 900 acres.

\$45,000 - The Natural Resources Conservation Service (NRCS) is working with Carey Dobson of the Timberline Cattle Company to complete approximately \$160,000 of work including installing new pipelines and drinkers in the vicinity of the proposed grassland treatment. We will be using \$45,000 of this as match for this year's proposal.

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Carey Dobson (Timberline Cattle Company) – leasee and cooperator. Carey will apply for the necessary permits through the Arizona State Land Department.

NRCS – Completed coordinated ranch plan and are assisting in current and past projects on the ranch. NRCS has also provided technical assistance.

Arizona State Land Department – The project is located on State Trust land and the project will be reviewed by the Arizona State Land Department. ASLD will also be responsible for completing the cultural resource clearance and obtaining SHPO concurrence.

Reliance Brush Management – Will be contracted to complete the grinding work.

WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?

YES[X] NO[] N/A[]

PROJECT MONITORING PLAN:

Vegetation monitoring will be conducted by AGFD and consist of randomly selected transect locations throughout the treatment area, stratified by Ecological Site. The line-point intercept method as described in "Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems, Volume I" by the United States Department of Agriculture will be used. Each point will be monitored prior to treatment, 1 year after treatment, and at least every 5 years thereafter. Monitoring will be continued for 10 years and will attempt to measure vegetative response to treatments.

PROJECT MAINTENANCE:

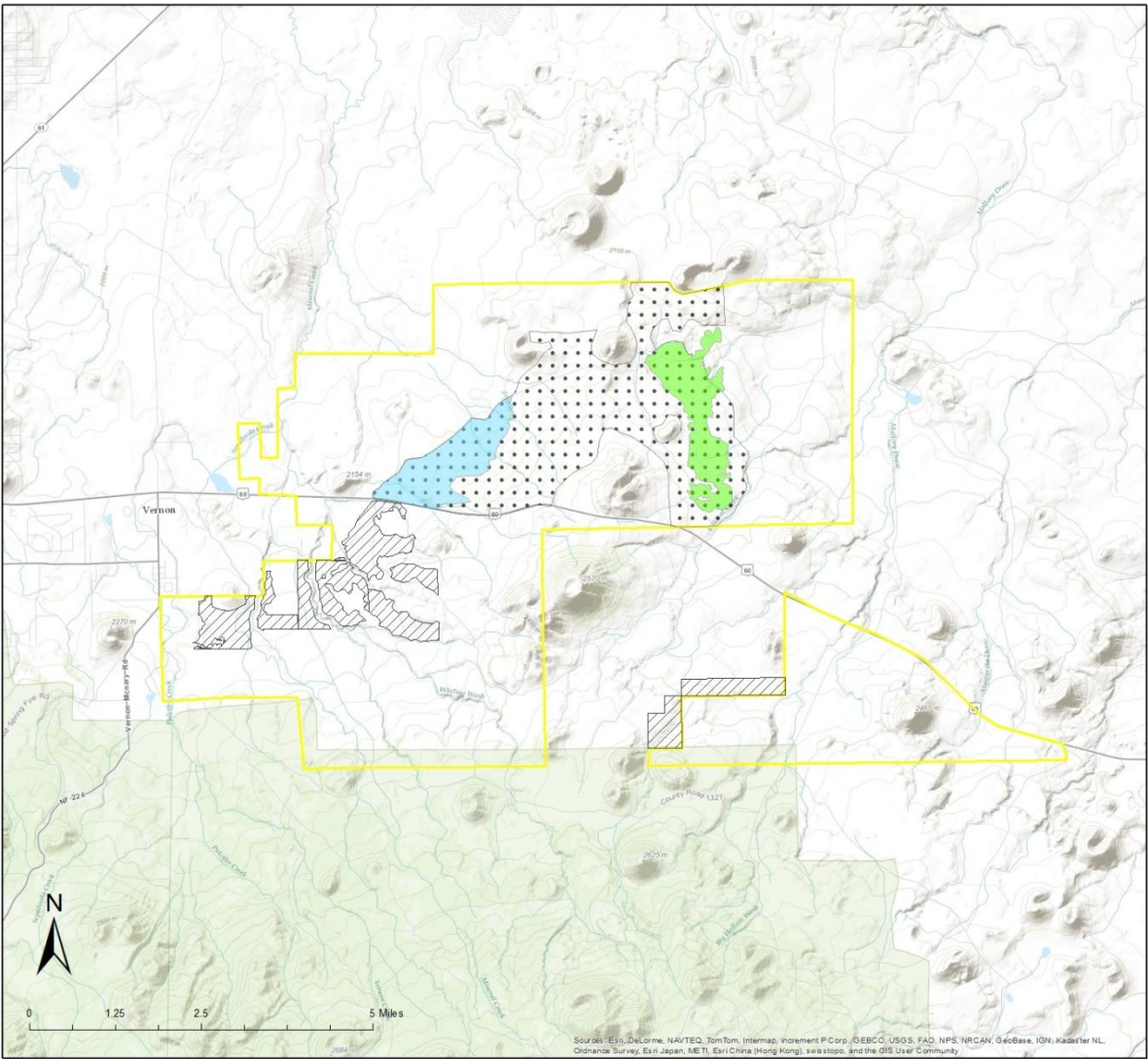
NA

PROJECT COMPLETION REPORT TO BE FILED BY:

Rachel Williams

TREE CLEARING/REMOVAL PROJECTS *(please use the worksheet below):*

Dobson Grassland Restoration



Legend

- 2013 Treatment
- 2014 Treatment
- Completed Acres
- Overall Treatment Goal
- Ranch Boundary



ARIZONA GAME AND FISH DEPARTMENT

TREE CLEARING/REMOVAL WORKSHEET

PROJECT TITLE: Dobson Grassland Restoration Phase I

1) What is the estimated acreage of the project?

1800 (Phase I)

2) How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):

Hydro Ax rubber tired loader with a Fecon mastication attachment.

3) What is the estimated number of trees per acre?

The estimated average number of trees per acre is approximately 14 junipers per acre within the treatment area. This estimate was obtained by randomly measuring 14 acres throughout the treatment area via aerial photography. Possibly errors in this measurement include inability to see small trees and inability to differential between junipers and other shrub species.

4) Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):

The species primarily consist of multi-stem one-seed juniper tree with an average of 8-14" diameter. Historic juniper production in this area was approximately 4 to 135 lbs per acre. Currently, production is approximately 22 to 1,252 lbs/acre of juniper.

5) Describe terrain (slope, soil type, rocks)

The terrain is mostly flat with shallow drainages throughout the project area. Soils range from shallow volcanic to very shallow volcanic soils. The area is primarily cobbly clay loam with 0-15% slopes.

6) Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.

None – State Trust Land

7) Please provide the following information about access to the proposed site:

Type of access (mark one): ☒ 2x4 vehicles ☐ 4x4 only ☐ Foot only**

**If foot access only: Distance in miles: Approx. hiking time:

Does access to this site require crossing private or tribal lands? YES ☐ NO ☒

Is the site relatively accessible for tree removal equipment? YES ☒ NO ☐

Please describe any restrictions to public access: none